# PFO CLOSURE META-ANALYSIS

"Meta-analysis comparing patent foramen ovale (PFO) closure versus medical therapy to prevent recurrent cryptogenic stroke" as published in the *American Journal of Cardiology* 

Meta-analysis of five randomized controlled trials (RCTs) found PFO closure plus medical management significantly reduces the risk of recurrent stroke compared to medical management alone.<sup>1</sup>



Relative recurrent stroke risk reduction with PFO closure plus medical therapy versus medical therapy alone<sup>1</sup>

51					

(p = .03)

Closure (N = 1829) Medical (N = 1611)

37 (2%)

72 (4.5%)

## Major bleeding

(p = .93)

Closure (N = 1760) Medical

No increased risk of major bleeding with PFO closure<sup>1</sup>

24 (1.4%)

(N = 1523)19 (1.2%)

### Atrial fibrillation (AF)

(p = .0001)

Increased risk of AF with PFO closure<sup>1</sup>

Closure (N = 1784)

76 (4.3%)\*

Medical (N = 1607)

12 (.7%)\*

71% (54 / 76) of AF events were considered transient<sup>1</sup>

<sup>\*</sup> Newly detected AF.

#### 3,440 Patients

Cryptogenic stroke<sup>†</sup> and PFO<sup>‡</sup>

Mean age range: 43–50

Mean follow-up: 4.1 years

RCTs: Closure 1-2012<sup>2</sup>, PC Trial-2013<sup>3</sup>, REDUCE-20174. RESPECT-2017<sup>5</sup> and CLOSE-20176

#### 1,829 PFO closure group

Devices varied

 Medical therapy regimen: Varied per study — Antiplatelet, anticoagulation or both

#### 1,611 Medical therapy group

• Medical therapy regimen: Varied per study — Antiplatelet, anticoagulation or both

- † Variable rates of cardiovascular risk factors.
- ‡ Variable rates of high-risk PFO features
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